



**PA-0046 US**

method comprising:

- a) hybridizing the cDNA of claim 9 with the sample, thereby forming a hybridization complex; and
- b) detecting complex formation wherein complex formation indicates expression of a complementary nucleic acid in the sample.

5 14. A method of using a cDNA to screen a plurality of molecules or compounds to identify a molecule or compound which specifically binds the cDNA, the method comprising:

- a) contacting the cDNA of claim 9 with the plurality of molecules or compounds under conditions to allow specific binding; and
  - b) detecting specific binding between the cDNA and at least one molecule or compound, thereby
- 10 identifying a molecule or compound that specifically binds the cDNA.

15. A protein produced by the method of claim 12.

16. A method for using a protein to screen a plurality of molecules or compounds to identify at least one ligand which specifically binds the protein, the method comprising:

- a) combining the protein of claim 15 with the plurality of molecules or compounds under conditions to
- 15 allow specific binding; and
- b) detecting specific binding between the protein and a molecule or compound, thereby identifying a ligand which specifically binds the protein.

17. The method of claim 16 wherein the plurality of molecules or compounds is selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, proteins, agonists, antagonists,

20 antibodies or their fragments, immunoglobulins, inhibitors, drug compounds, and pharmaceutical agents.

18. An antibody which specifically binds the protein of claim 15.

19. A method of using a protein to produce and purify an antibody, the method comprising:

- a) immunizing an animal with the protein of claim 15 under conditions to elicit an antibody response;
- b) isolating animal antibodies;
- 25 c) contacting the protein with the isolated antibodies under conditions to allow specific binding;
- d) recovering the bound protein; and
- e) separating the protein from the antibody, thereby obtaining purified antibody.

20. A method of using an antibody to detect a protein in a sample, the method comprising:

- a) contacting the antibody of claim 18 with a sample under condition for the formation of an
- 30 antibody:protein complex, and
- b) detecting the antibody:protein complex wherein complex formation indicates the presence of the protein in the sample.